



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,047	06/29/2001	Santosh S. Chandrachood	CISCO-4306	9309

7590 04/10/2006

David B. Ritchie
Thelen Reid & Priest LLP
P.O. Box 640640
San Jose, CA 95164-0640

EXAMINER

BATURAY, ALICIA

ART UNIT PAPER NUMBER

2155

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/895,047	Applicant(s) CHANDRACHOOD, SANTOSH S.	
	Examiner Alicia Baturay	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 74-105 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 74-105 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the amendment filed 2 February 2006.
2. Claims 74-105 are pending in this Office Action.

Response to Amendment

3. The rejection of claims 74-81 under 35 U.S.C. § 101 was addressed and is withdrawn.
4. Applicant's amendments and arguments with respect to claims 74-105 filed on 2 February 2006 have been fully considered but they are deemed to be moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 82-97 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
7. It is noted that claim 82 recites the term "lookahead processor," which would normally be interpreted as hardware; however, a review of applicant's specification, particularly the discussion on pages 18-19 raises a question as to whether this is the case. Specifically, the discussion that an "SNMP agent may be part of a networked device such as a router, switch, access server or the like...Agent also includes a lookahead processor coupled to a pattern

storage and the response cache” suggests that the lookahead processor, pattern storage and response cache are all software. Thus, absent recitation of the networked device or some other hardware, claim 82 is not limited to tangible embodiments, instead being sufficiently broad to encompass software, per se. Claims 75-81 fail to add any additional structure to the apparatus, instead merely further limiting the intended use of the apparatus. Thus, they fail to overcome the deficiencies of claim 74.

8. Claim 90 describes an apparatus in which all of the elements could reasonably be interpreted by one of ordinary skill in light of the disclosure (see previous discussion of claim 82) as software, such that the apparatus is software, per se. Claims 91-97 fail to add any additional structure to the apparatus, instead merely further limiting the intended use of the apparatus. Thus, they fail to overcome the deficiencies of claim 90.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 74, 75, 79, 82, 83, 87, 90, 91, 95, 98, 99 and 103 are rejected under 35 U.S.C. § 103(a) as being unpatentable by Chen et al. (U.S. 6,076,107) and further in view of Williams (U.S. 6,151,630).

Chen teaches the invention substantially as claimed including a method of data retrieval that reduces the number of message flows in a Simple Network Management Protocol (SNMP) device (see Abstract).

11. With respect to claim 74, Chen teaches a method of predictively responding to a network management data request, the method comprising:

Sending a response including data responsive to the prefetched network management data request if the data responsive to the network management data request is contained in the cache of prefetched network management data (Chen, col. 7, lines 1-7); and initiating periodic data collections for data relating to the pattern if the data responsive to the network management data request is not contained in the cache of prefetched network management data (Chen, col. 7, lines 8-12).

Chen does not explicitly teach determining if a request contains a defined pattern.

However, Williams teaches determining if the data request contains a pattern (one record exists for each page that is included in a sequence – see Williams, Fig. 1, elements 108 and 109; col. 3, lines 1-3) defined in a memory and determining if data responsive to the data request (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39) is contained in a cache of prefetched data (loading a copy of records of all pages of all sequences that are stored in server into allocated memory. This copy and not the originals will be used by processor to service the user's page-access requests. Optionally, processor may also place the corresponding pages in a cache

memory – see Williams, col. 4, lines 20-30) if the data request contains a pattern defined in the memory (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chen in view of Williams in order to enable determining if a request contains a defined pattern. One would be motivated to do so in order to enable loading a copy of a set of data into a cache memory to service a user's requests.

12. With respect to claim 75, Chen teaches the invention described in claim 74, including the method further comprising:

Transmitting the network management data request to a network management data core to respond to the network management data request if the network management data request does not contain a pattern defined in the memory (Chen, col. 3, lines 32-46).

13. With respect to claim 79, Chen teaches the invention described in claim 74, including the method where the network management data request is a Simple Network Management Protocol (SNMP) request (Chen, col. 5, lines 3-7).

14. Claims 82, 83, 87, 90, 91, 95, 98, 99 and 103 do not teach or define any new limitations above claims 74, 75 and 79 and therefore are rejected for similar reasons.

15. Claims 76-78, 80, 81, 84-86, 88, 89, 92-94, 96, 97, 100-102, 104 and 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Williams and further in view of Case et al. ("Request for Comments: 1157").

Chen teaches the invention substantially as claimed including a method of data retrieval that reduces the number of message flows in a Simple Network Management Protocol (SNMP) device (see Abstract).

16. With respect to claim 76, Chen teaches the invention described in claim 74, including a method of predictively responding to a network management data request, the method comprising:

Sending a response including data responsive to the prefetched network management data request if the data responsive to the network management data request is contained in the cache of prefetched network management data (Chen, col. 7, lines 1-7); and initiating periodic data collections for data relating to the pattern if the data responsive to the network management data request is not contained in the cache of prefetched network management data (Chen, col. 7, lines 8-12).

Chen does not explicitly teach determining if a request contains a defined pattern.

However, Williams teaches determining if the data request contains a pattern (one record exists for each page that is included in a sequence – see Williams, Fig. 1, elements 108 and 109; col. 3, lines 1-3) defined in a memory and determining if data responsive to the data request (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL

exists – see Williams, col. 4, lines 34-39) is contained in a cache of prefetched data (loading a copy of records of all pages of all sequences that are stored in server into allocated memory. This copy and not the originals will be used by processor to service the user's page-access requests. Optionally, processor may also place the corresponding pages in a cache memory – see Williams, col. 4, lines 20-30) if the data request contains a pattern defined in the memory (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chen in view of Williams in order to enable determining if a request contains a defined pattern. One would be motivated to do so in order to enable loading a copy of a set of data into a cache memory to service a user's requests.

Chen teaches a method of predictively responding to a network management data request, the method comprising:

Sending a response including data responsive to the prefetched network management data request if the data responsive to the network management data request is contained in the cache of prefetched network management data (Chen, col. 7, lines 1-7); and initiating periodic data collections for data relating to the pattern if the data responsive to the network management data request is not contained in the cache of prefetched network management data (Chen, col. 7, lines 8-12).

Chen does not explicitly teach determining if a request contains a defined pattern.

However, Williams teaches determining if the data request contains a pattern (one record exists for each page that is included in a sequence – see Williams, Fig. 1, elements 108 and 109; col. 3, lines 1-3) defined in a memory and determining if data responsive to the data request (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39) is contained in a cache of prefetched data (loading a copy of records of all pages of all sequences that are stored in server into allocated memory. This copy and not the originals will be used by processor to service the user's page-access requests. Optionally, processor may also place the corresponding pages in a cache memory – see Williams, col. 4, lines 20-30) if the data request contains a pattern defined in the memory (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chen in view of Williams in order to enable determining if a request contains a defined pattern. One would be motivated to do so in order to enable loading a copy of a set of data into a cache memory to service a user's requests.

The combination of Chen and Williams does not explicitly teach what the pattern comprises of.

However, Case teaches where the pattern is identified by a pattern; and the pattern ID comprises a community string (Case, page 13, last paragraph- page 14, first paragraph).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Chen and Williams in view of Case in order to use a specific type of pattern. One would be motivated to do so in order to minimize the amount of traffic generated by the network management function.

17. With respect to claim 77, Chen teaches the invention described in claim 76, including a method of predictively responding to a network management data request, the method comprising:

Sending a response including data responsive to the prefetched network management data request if the data responsive to the network management data request is contained in the cache of prefetched network management data (Chen, col. 7, lines 1-7); and initiating periodic data collections for data relating to the pattern if the data responsive to the network management data request is not contained in the cache of prefetched network management data (Chen, col. 7, lines 8-12).

Chen does not explicitly teach determining if a request contains a defined pattern.

However, Williams teaches determining if the data request contains a pattern (one record exists for each page that is included in a sequence – see Williams, Fig. 1, elements 108 and 109; col. 3, lines 1-3) defined in a memory and determining if data responsive to the data request (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39) is contained in a cache of prefetched data (loading a copy of records of all pages of all sequences that are stored in server into allocated

memory. This copy and not the originals will be used by processor to service the user's page-access requests. Optionally, processor may also place the corresponding pages in a cache memory – see Williams, col. 4, lines 20-30) if the data request contains a pattern defined in the memory (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chen in view of Williams in order to enable determining if a request contains a defined pattern. One would be motivated to do so in order to enable loading a copy of a set of data into a cache memory to service a user's requests.

Chen teaches a method of predictively responding to a network management data request, the method comprising:

Sending a response including data responsive to the prefetched network management data request if the data responsive to the network management data request is contained in the cache of prefetched network management data (Chen, col. 7, lines 1-7); and initiating periodic data collections for data relating to the pattern if the data responsive to the network management data request is not contained in the cache of prefetched network management data (Chen, col. 7, lines 8-12).

Chen does not explicitly teach determining if a request contains a defined pattern.

However, Williams teaches determining if the data request contains a pattern (one record exists for each page that is included in a sequence – see Williams, Fig. 1, elements 108 and 109; col. 3, lines 1-3) defined in a memory and determining if data responsive to the data

request (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39) is contained in a cache of prefetched data (loading a copy of records of all pages of all sequences that are stored in server into allocated memory. This copy and not the originals will be used by processor to service the user's page-access requests. Optionally, processor may also place the corresponding pages in a cache memory – see Williams, col. 4, lines 20-30) if the data request contains a pattern defined in the memory (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chen in view of Williams in order to enable determining if a request contains a defined pattern. One would be motivated to do so in order to enable loading a copy of a set of data into a cache memory to service a user's requests.

The combination of Chen and Williams does not explicitly teach what the pattern comprises of.

However, Case teaches where the pattern further comprises a periodicity of bursts for network management data requests containing the pattern (Case, col. 6, lines 7-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Chen and Williams in view of Case in order to use a specific type of pattern. One would be motivated to do so in order to minimize the amount of traffic generated by the network management function.

18. With respect to claim 78, Chen teaches the invention described in claim 77, including a method of predictively responding to a network management data request, the method comprising:

Sending a response including data responsive to the prefetched network management data request if the data responsive to the network management data request is contained in the cache of prefetched network management data (Chen, col. 7, lines 1-7); and initiating periodic data collections for data relating to the pattern if the data responsive to the network management data request is not contained in the cache of prefetched network management data (Chen, col. 7, lines 8-12).

Chen does not explicitly teach determining if a request contains a defined pattern.

However, Williams teaches determining if the data request contains a pattern (one record exists for each page that is included in a sequence – see Williams, Fig. 1, elements 108 and 109; col. 3, lines 1-3) defined in a memory and determining if data responsive to the data request (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39) is contained in a cache of prefetched data (loading a copy of records of all pages of all sequences that are stored in server into allocated memory. This copy and not the originals will be used by processor to service the user's page-access requests. Optionally, processor may also place the corresponding pages in a cache memory – see Williams, col. 4, lines 20-30) if the data request contains a pattern defined in the memory (a user requests a page by specifying a URL...Receipt of such a request at server

invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chen in view of Williams in order to enable determining if a request contains a defined pattern. One would be motivated to do so in order to enable loading a copy of a set of data into a cache memory to service a user's requests.

Chen teaches a method of predictively responding to a network management data request, the method comprising:

Sending a response including data responsive to the prefetched network management data request if the data responsive to the network management data request is contained in the cache of prefetched network management data (Chen, col. 7, lines 1-7); and initiating periodic data collections for data relating to the pattern if the data responsive to the network management data request is not contained in the cache of prefetched network management data (Chen, col. 7, lines 8-12).

Chen does not explicitly teach determining if a request contains a defined pattern.

However, Williams teaches determining if the data request contains a pattern (one record exists for each page that is included in a sequence – see Williams, Fig. 1, elements 108 and 109; col. 3, lines 1-3) defined in a memory and determining if data responsive to the data request (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39) is contained in a cache of prefetched data (loading a copy of records of all pages of all sequences that are stored in server into allocated

memory. This copy and not the originals will be used by processor to service the user's page-access requests. Optionally, processor may also place the corresponding pages in a cache memory – see Williams, col. 4, lines 20-30) if the data request contains a pattern defined in the memory (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chen in view of Williams in order to enable determining if a request contains a defined pattern. One would be motivated to do so in order to enable loading a copy of a set of data into a cache memory to service a user's requests.

The combination of Chen and Williams does not explicitly teach what the initiating periodic data collections comprise of.

However, Case teaches where the initiating includes initiating periodic data collections at a rate matching the periodicity of bursts for network management data requests containing the pattern (Case, col. 6, lines 7-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Chen and Williams in view of Case in order to use a specific type of pattern. One would be motivated to do so in order to minimize the amount of traffic generated by the network management function.

19. With respect to claim 80, Chen teaches the invention described in claim 74, including a method of predictively responding to a network management data request, the method comprising:

Sending a response including data responsive to the prefetched network management data request if the data responsive to the network management data request is contained in the cache of prefetched network management data (Chen, col. 7, lines 1-7); and initiating periodic data collections for data relating to the pattern if the data responsive to the network management data request is not contained in the cache of prefetched network management data (Chen, col. 7, lines 8-12).

Chen does not explicitly teach determining if a request contains a defined pattern.

However, Williams teaches determining if the data request contains a pattern (one record exists for each page that is included in a sequence – see Williams, Fig. 1, elements 108 and 109; col. 3, lines 1-3) defined in a memory and determining if data responsive to the data request (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39) is contained in a cache of prefetched data (loading a copy of records of all pages of all sequences that are stored in server into allocated memory. This copy and not the originals will be used by processor to service the user's page-access requests. Optionally, processor may also place the corresponding pages in a cache memory – see Williams, col. 4, lines 20-30) if the data request contains a pattern defined in the memory (a user requests a page by specifying a URL...Receipt of such a request at server

invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chen in view of Williams in order to enable determining if a request contains a defined pattern. One would be motivated to do so in order to enable loading a copy of a set of data into a cache memory to service a user's requests.

Chen teaches a method of predictively responding to a network management data request, the method comprising:

Sending a response including data responsive to the prefetched network management data request if the data responsive to the network management data request is contained in the cache of prefetched network management data (Chen, col. 7, lines 1-7); and initiating periodic data collections for data relating to the pattern if the data responsive to the network management data request is not contained in the cache of prefetched network management data (Chen, col. 7, lines 8-12).

Chen does not explicitly teach determining if a request contains a defined pattern.

However, Williams teaches determining if the data request contains a pattern (one record exists for each page that is included in a sequence – see Williams, Fig. 1, elements 108 and 109; col. 3, lines 1-3) defined in a memory and determining if data responsive to the data request (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39) is contained in a cache of prefetched data (loading a copy of records of all pages of all sequences that are stored in server into allocated

memory. This copy and not the originals will be used by processor to service the user's page-access requests. Optionally, processor may also place the corresponding pages in a cache memory – see Williams, col. 4, lines 20-30) if the data request contains a pattern defined in the memory (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chen in view of Williams in order to enable determining if a request contains a defined pattern. One would be motivated to do so in order to enable loading a copy of a set of data into a cache memory to service a user's requests.

The combination of Chen and Williams does not explicitly teach what the pattern comprises of.

However, Case teaches where the pattern comprises a network management system IP address (Case, page 13, last paragraph – page 14, first paragraph).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Chen and Williams in view of Case in order to use a specific type of pattern. One would be motivated to do so in order to minimize the amount of traffic generated by the network management function.

20. With respect to claim 81, Chen teaches the invention described in claim 74, including a method of predictively responding to a network management data request, the method comprising:

Sending a response including data responsive to the prefetched network management data request if the data responsive to the network management data request is contained in the cache of prefetched network management data (Chen, col. 7, lines 1-7); and initiating periodic data collections for data relating to the pattern if the data responsive to the network management data request is not contained in the cache of prefetched network management data (Chen, col. 7, lines 8-12).

Chen does not explicitly teach determining if a request contains a defined pattern.

However, Williams teaches determining if the data request contains a pattern (one record exists for each page that is included in a sequence – see Williams, Fig. 1, elements 108 and 109; col. 3, lines 1-3) defined in a memory and determining if data responsive to the data request (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39) is contained in a cache of prefetched data (loading a copy of records of all pages of all sequences that are stored in server into allocated memory. This copy and not the originals will be used by processor to service the user's page-access requests. Optionally, processor may also place the corresponding pages in a cache memory – see Williams, col. 4, lines 20-30) if the data request contains a pattern defined in the memory (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chen in view of Williams in order to enable determining if a request

contains a defined pattern. One would be motivated to do so in order to enable loading a copy of a set of data into a cache memory to service a user's requests.

Chen teaches a method of predictively responding to a network management data request, the method comprising:

Sending a response including data responsive to the prefetched network management data request if the data responsive to the network management data request is contained in the cache of prefetched network management data (Chen, col. 7, lines 1-7); and initiating periodic data collections for data relating to the pattern if the data responsive to the network management data request is not contained in the cache of prefetched network management data (Chen, col. 7, lines 8-12).

Chen does not explicitly teach determining if a request contains a defined pattern.

However, Williams teaches determining if the data request contains a pattern (one record exists for each page that is included in a sequence – see Williams, Fig. 1, elements 108 and 109; col. 3, lines 1-3) defined in a memory and determining if data responsive to the data request (a user requests a page by specifying a URL...Receipt of such a request at server invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39) is contained in a cache of prefetched data (loading a copy of records of all pages of all sequences that are stored in server into allocated memory. This copy and not the originals will be used by processor to service the user's page-access requests. Optionally, processor may also place the corresponding pages in a cache memory – see Williams, col. 4, lines 20-30) if the data request contains a pattern defined in the memory (a user requests a page by specifying a URL...Receipt of such a request at server

invokes...processor [to] check[s] whether a record that corresponds to the received URL exists – see Williams, col. 4, lines 34-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chen in view of Williams in order to enable determining if a request contains a defined pattern. One would be motivated to do so in order to enable loading a copy of a set of data into a cache memory to service a user's requests.

The combination of Chen and Williams does not explicitly teach what the pattern comprises of.

However, Case teaches where the pattern comprises a network management system port number (Case, page 13, last paragraph- page 14, first paragraph).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Chen and Williams in view of Case in order to use a specific type of pattern. One would be motivated to do so in order to minimize the amount of traffic generated by the network management function.

21. Claims 84-86, 88, 89, 92-94, 96, 97, 100-102, 104 and 105 do not teach or define any new limitations above claims 76-78, 80 and 81 and therefore are rejected for similar reasons.

Response to Arguments

22. Applicant's arguments filed 2 February 2006 have been fully considered, but they are not persuasive for the reasons set forth below.
23. ***Applicant Argues:*** Applicant states "Hill fails to teach or suggest 'determining if data responsive to the data request is contained in a cache of prefetched data if the data request contains a pattern defined in the memory. At no point does Hill determine if the requested data is in the internal cache if the pattern matches. How can it, since it checks the internal cache before it even determines if there is a matching pattern. Indeed, the pattern matching described in Hill is only utilized to determine which data to prefetch, but is not utilized at all when actually pulling the prefetched data out of the cache.'"
24. ***In Response:*** The examiner respectfully submits that Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay
April 6, 2006


SALEH NAJJAR
SUPERVISORY PATENT EXAMINER